

The opinion in support of the decision being entered today was **not** written  
for publication and is **not** binding precedent of the Board.

**UNITED STATES PATENT AND TRADEMARK OFFICE**

---

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

---

**Ex parte Yu-Hung Kao**

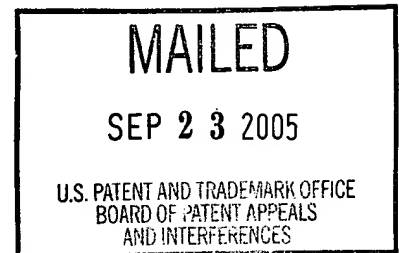
---

Appeal No. 2005-2200  
Application No. 09/590,613

---

**ON BRIEF**

---



Before KRASS, DIXON, and BARRY, **Administrative Patent Judges.**  
DIXON, **Administrative Patent Judge.**

**DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1-13,  
which are all of the claims pending in this application.

**We AFFIRM AND ENTER A NEW GROUNDS OF REJECTION.**

## **BACKGROUND**

Appellant's invention relates to a compact text-to-phone pronunciation dictionary. An understanding of the invention can be derived from a reading of exemplary claims 1, 5, 9 and 10 which are reproduced below.

1. A pronunciation dictionary comprising:  
  
    alphabetized text and corresponding phones;  
  
    overlapping characters with previous entry that are prefix delta encoded;  
    and  
  
    a rule set to convert text to phones for text not in the dictionary and fit the rule set.
5. A pronunciation dictionary comprising:  
  
    a rule set to convert text to phone for text not in the dictionary; and  
  
    an error encoded set for those entries different from the rule set wherein the entry only contains the difference with the rule prediction.
9. A processor chip for speech recognition comprising:  
  
    a processor, and  
  
    a pronunciation dictionary comprising:  
  
        alphabetized text and corresponding phones;  
  
        overlapping characters with previous entry are prefix delta encoded;  
  
        a rule set to convert text to phones for text not in the dictionary; and an error encoded set for those entries different from the rule set wherein the entry only contains the difference with the rule set prediction.

10. A method of making a pronunciation dictionary that comprising the steps of:
- alphabetizing text and corresponding phones;
- prefix delta encoding overlapping characters with previous entry; and
- providing a rule set for converting text to phones according to said rule set for text not in the dictionary and fit the rule set.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Kanevsky et al. (Kanevsky)	5,835,888	Nov. 10, 1998
Das	6,148,283	Nov. 14, 2000 (filed Sep. 23, 1998)
Kuhn et al. (Kuhn)	6,230,131	May 8, 2001 (filed Apr. 29, 1998)

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the answer (mailed Jun. 17, 2003) for the examiner's reasoning in support of the rejections, and to the brief (filed Apr. 9, 2003) and the reply brief (filed Aug. 6, 2003) for appellant's arguments thereagainst.

### **OPINION**

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we make the determinations which follow.

Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants could have made but chose not to make in the brief have not been considered. We deem such arguments to be waived by Appellants [see 37 CFR § 41.37(c)(1)(vii) effective September 13, 2004 replacing 37 CFR § 1.192(a)].

Here, we note that the examiner has modified the rejection of claims 1 and 10 under 35 U.S.C. § 102 over Kanevsky alone to be a rejection under 35 U.S.C. § 103 over Kanevsky in view Kuhn. While the examiner indicates that the appellant's indication of the issues is correct, the examiner then changes the grounds of rejection from anticipation to obviousness (since the claims were amended in an amendment under 37 CFR 1.116 filed Jan. 14, 2003). (Answer at pages 2 and 3.) In the reply brief, appellant again discusses the first issue with respect to anticipation. (Reply brief at page 1.) Since this change in the grounds is similar to the original grounds of rejection and similar to the rejection of other claims in the case, we will interpret appellant's

arguments generally to apply them to the obviousness rejection under review in the answer.

### **35 U.S.C. § 103**

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. **See In re Rijckaert**, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. **See In re Lintner**, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. **See In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. **See In re Warner**, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967), **cert. denied**,

389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. **See, e.g., Grain Processing Corp. v. American Maize-Prods. Co.**, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

When determining obviousness, "the [E]xaminer can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.'" **In re Lee**, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), citing **In re Fritch**, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'" **In re Dembiczak**, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact." **Dembiczak**, 175 F.3d at 999-1000, 50 USPQ2d at 1617, citing **McElmurry v. Arkansas Power & Light Co.**, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

Further, as pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." **In re Hiniker Co.**, 150 F.3d

1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Therefore, we look to the limitations of independent claim 1.

At pages 5-6 of the brief and repeated at pages 1-2 of the reply brief, appellant states that

the background of the invention of the specification describes what a text-to-phone dictionary is as compared to building speech recognition models. In building speech recognition models of the first [sic, first] step is to go to the pronunciation dictionary and state with the text and lookup a pronunciation dictionary of the phones for the text. Once the phones are identified and the sequence of phones for the words is determined, HMM model for each phone is determined.

The present claimed invention relates to a pronunciation dictionary. In accordance with the Claim 1 this memory space for the look up is reduced by the dictionary containing alphabetized text and corresponding phones, overlapping characters with previous entry that are prefix delta encoded; and by a rule set to convert text to phones for text not in the dictionary but fit the rule set. This combination reduces the memory space to do the lookup.

Appellant's then argue at page 2 of the reply brief that

The examiner's response beginning on page 13 [of the answer] argues that although Kanevsky provides other features to which applicant does not implement, the word model of Kanevsky provides support for a pronunciation dictionary regardless of how the dictionary is partitioned. This assumes a partitioned pronunciation dictionary. The Kanevsky reference deals with language modeling. Language modeling is statistical and is based on the probability of a word following another word. It describes grammar in a probabilistic fashion. A pronunciation dictionary is not probabilistic at all. For each entry in a pronunciation dictionary, i.e. a word, there is one and only one sequence of phones to describe its pronunciation. Kanevsky split words into prefix/stem ending and then built the language model on these so-called "sub-vocabulary" instead of on the regular "word vocabulary". Applicant's dictionary does not depend on the

creation of a smaller "sub-vocabulary". Applicant's prefix does not have to have any pronunciation significance or morphological pronunciation. It does not have to have any high frequency of use to be worthy of being put into the "vocabulary." As long as there is an overlap of spelling between neighboring entries, applicant's dictionary will take advantage of it. The Kanevsky reference does not discuss a pronunciation dictionary where for a word there is a single sequence of phones. The Kanevsky reference does not teach a prefix that does not have a pronunciation significance or morphological significance or have to have a high frequency of appearance to be put into the vocabulary. Kanevsky does not teach any of this and is not even concerned with the size of the pronunciation dictionary itself. Kanevsky does not solve applicant's problem of reducing the size of the lookup table.

The applicant further calls for the dictionary to include a text to phone rule set for text not in the dictionary. While a rule set per se is known all prior art strived to improve the rule set so that the pronunciation will be as close to a dictionary as possible. Sometimes the rule set ended up becoming larger than a dictionary, which defeats the purpose of a rule set. The use of a rule set is not taught in Kanevsky. This element in the pronunciation dictionary further minimizes the alphabetical listing by a rule set. There is nothing in Kanevsky to suggest this. The examiner references Col. 1, lines 49-55 of Kuhn et al (U.S. Patent No. 6,230,131) hereinafter Kuhn. It states that a decision tree can also be used in a speech synthesis system to generate pronunciation for words not found in the current dictionary. Kuhn teaches a method of using a decision tree questions to generate phone from spelling. This method requires "letter only trees" and "mixed trees" which require a lot of memory to store. Kuhn has to do with pronunciation that is not in the dictionary. In the prior art a rule set strived to improve the rule so that pronunciation will be as close to a dictionary as possible. This is not to be used in addition to a dictionary. Kuhn teaches away from applicant's teaching. Applicant's invention is for a different purpose. Applicant teaches to generate "dictionary accurate pronunciation" using a much smaller memory than required by a current dictionary with full alphabetical listing by an alphabetical listing dictionary with overlapping characters with previous entry that are prefix delta encoded and by a simple rule set for those words not found in the dictionary. There is nothing in Kuhn that suggests providing a reduced size pronunciation dictionary using Kuhn's decision tree or Kuhn's decision tree with an alphabetized text and corresponding phones and/or



overlapping characters with previous entry that are prefix delta encoded. Kanevsky does not suggest a rule set to convert text to phones for text not in a pronunciation dictionary and fit the rule set. The combination of a decision tree as taught in Kuhn with Kanevsky would not result in a reduced size memory for the letter only trees and the mixed trees would require a lot of memory. The examiner states that: "Kuhn specifically teaches that implementation of the spelling-to-pronunciation decision tree allows the user to add words to the recognition dictionary without having to understand the nuances of building a phonetic transcription, and thus one of ordinary skill in the art would recognize the advantages of user-friendliness with which new words could be added to the system". This of course is false and false reasoning. As discussed previously Kuhn has to do with pronunciation that is not in the dictionary. In the prior art a rule set strived to improve the rule so that pronunciation will be as close to a dictionary as possible and not to be used in addition to a dictionary. A dictionary would defeat the purpose of a rule set. One of ordinary skill in the art would not recognize the advantages of a reduced size memory because the decision tree process would add to the overall size of the memory. One of ordinary skill in the art would not use a decision tree as taught in Kuhn with there is also alphabetized text and corresponding phones and overlapping characters with previous entry that are prefix delta encoded since that would be duplication of data since the decision tree should likely convert the text. Applicant is using a much simpler rule set for text not in the dictionary.

As stated in *In re Fritch*, 23 USPQ2d 1780 "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." There is nothing in the references to teach or suggest the combination.

Here the appellant recognizes that the rejection is based upon obviousness, but the majority of the arguments are directed to the problems that appellant's invention addressed and that the dictionary saves memory. We find no express or implied support in the language of independent claims 1 and 10 for these arguments.

Therefore, these arguments are not persuasive. Additionally, differences between the dictionaries of Kanevsky and appellant's disclosed invention are irrelevant unless appellant can relate the differences to the invention recited in the claims. Here, appellant has not established this requisite nexus to the claimed invention. Therefore, this argument is not persuasive. Appellant argues that Kanevsky does not discuss a pronunciation dictionary where for a word there is a single sequence of phones. (Brief at page 6.) Again, we find that appellant has not established this requisite nexus to the claimed invention. Therefore, this argument is not persuasive.

With respect to independent claims 5 and 9 and dependent claims 2-4, 6-8 and 11-13, the examiner relies upon the teachings of Das with respect to error encoding with digital speech encoding and decoding. The examiner maintains that Das is in a "similar field of endeavor." Appellant argues that Das only applies to numerical data and that the Das reference does not teach or suggest error coding even on text encoding, not to mention pronunciation encoding. We disagree with appellant and find that Das teaches at column 6, lines 45-48, that the "method and apparatus is primarily disclosed in the context of the quantization of LSP's in a speech encoder." We find that these LSP's are Line Spectral Pairs (See Das at col. 2) and that these representations relate to the techniques for digitally encoding and decoding speech. (See Das at col. 1, line 9.) Here, we agree with the examiner that Das teaches encoding differences with respect to speech data. While it does not specifically encode dictionary data, we

would agree with the examiner that, as broadly recited in the claims, Das would have suggested encoding wherein an entry only contains the differences between the rule set predictions. Therefore, we agree that the examiner has made at least a *prima facie* case for the combination of the teachings. Therefore, we look to appellant's arguments to rebut this *prima facie* case of the combination of Das with Kuhn and Kanevsky.

Appellant argues that Das does not teach or suggest the claimed pronunciation dictionary comprising an error encoded set for those entries different from the rule set wherein the entry only contains the difference with the rule prediction. (Reply brief at page 6 and brief at page 9.) We agree with appellant, but note that it is the combined teachings of Das and Kuhn and further in view of Kanevsky that the appellant must address. Here, we find the claims are quite broad and appellant has set forth only specific arguments that do not have a nexus to the invention as recited in the claims. Appellant's reiteration of the claim language and sweeping argument that one of the references does not teach or suggest the claimed limitation does not specifically address the merits of the examiner's rejection. Therefore, this argument is not persuasive.

With respect to further dependent claims, appellant reiterates the language of the claim and that these additional limitations are not taught or suggested by any of the references and concludes each discussion that there is nothing in the references that teaches or suggests the combination. We do not find these arguments to be specific

arguments for patentability. Therefore, these arguments are not persuasive. Since we do not find that appellant has rebutted or shown error in the examiner's *prima facie* case, we will sustain the rejection of independent claims 5 and 9 and dependent claims 2-4, 6-8 and 11-13.

### **NEW GROUNDS OF REJECTION**

#### **35 U.S.C. § 112, SECOND PARAGRAPH**

Independent claims 1 and 5 (and dependent claims 2-4 and 6-8) are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the appellant regards as the invention.<sup>1</sup>

The second paragraph of 35 U.S.C. § 112 requires claims to set out and circumscribe a particular area with a reasonable degree of precision and particularity. **In re Johnson**, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977). In making this determination, the definiteness of the language employed in the claims must be analyzed, not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. **Id.**

---

<sup>1</sup> Additionally, we note that dependent claims 55 and 56 appear to depend from the incorrect independent claim since their preambles refer to a "computer program embodied in a computer-readable medium . . . recited in claim 32," but independent claim 32 is directed to a method while independent claim 37 is directed to "a computer program embodied in a computer-readable medium." This matter may be corrected when the application is before the examiner again.

The examiner's focus during examination of claims for compliance with the requirement for definiteness of 35 U.S.C. § 112, second paragraph, is whether the claims meet the threshold requirements of clarity and precision, not whether more suitable language or modes of expression are available. Some latitude in the manner of expression and the aptness of terms is permitted even though the claim language is not as precise as the examiner might desire. If the scope of the invention sought to be patented cannot be determined from the language of the claims with a reasonable degree of certainty, a rejection of the claims under 35 U.S.C. § 112, second paragraph, is appropriate.

Furthermore, appellant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought. As noted by the Court in *In re Swinehart*, 439 F.2d 210, 213-14, 169 USPQ 226, 228-29 (CCPA 1971), a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought.

Claims are considered to be definite, as required by the second paragraph of 35 U.S.C. § 112, when they define the metes and bounds of a claimed invention with a reasonable degree of precision and particularity. **See *In re Venezia***, 530 F.2d 956, 958, 189 USPQ 149, 151 (CCPA 1976).

With this as background, we analyze the specific language of the claims to determine the appropriateness of a rejection under 35 U.S.C. § 112, second paragraph.

In both independent claims 1 and 5, we find that a pronunciation dictionary is being recited in the preamble. The body of these claims recite various facets of the dictionary with respect to the relationship of the text and phones and functional limitations which more or less parallel those limitations recited in independent claim 9 without the recitation of a processor chip or other medium for embodying the functional limitations. Therefore, we find that these claims and their dependent claims are indefinite since they do not define the metes and bounds of a claimed invention with a reasonable degree of precision and particularity.

Moreover, we note that the general rule is that a claim must set out and circumscribe a particular area with a reasonable degree of precision and particularity when read in light of the disclosure as it would be by the artisan. **In re Moore**, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971). Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed in light of the specification. **Seattle Box Co. v. Industrial Crating & Packing, Inc.**, 731 F.2d 818, 826, 221 USPQ 568, 574 (Fed. Cir. 1984). Here, we find that one of ordinary skill in the art would not understand what is claimed in the express language of independent claims 1 and 5 in light of the specification.

**35 U.S.C. § 101**

Independent claims 1 and 5 and their dependent claims stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claims 1 and 5 recite "A pronunciation dictionary" and recite various functional relationships between the text and phones. Here, we conclude that the claimed dictionary of independent claims 1 and 5 are non-statutory subject matter because (1) they do not fall within one of the four statutory categories of subject matter under 35 U.S.C. § 101, and (2) they are directed to an abstract idea.

Even if the underlying process is statutory, by claiming the data or dictionary per se, appellant is seeking to patent an abstract idea or a form of an abstract idea. The dictionary claimed is a representation of an abstract idea. It is an idea of how to describe an abstract manipulation. The claims do not seek the protection of a physical process, product/machine, article of manufacture or composition of matter or improvement thereof as enumerated in the statutory authority of 35 U.S.C. § 101, but the idea expressed by the term "pronunciation dictionary." The pronunciation dictionary does not represent functional descriptive matter embodied in a usable medium which if imparted to a computer would cause a computer to implement a process or become a specialized machine. Here, there is no medium in which the pronunciation dictionary is embodied so that it would arguably fall within the purview of the statute as an article of manufacture or machine.

The claims are directed to non-statutory subject matter because the recitation of the interrelationship of text and phones and a rule set for conversion of text to phones is not a practical application within the technological arts. The recited characteristics of the dictionary are a description of the interrelationship of text and phones itself and not a process that can be performed by a computer when imparted with the requisite functionality. There is nothing necessarily physical about the claimed “pronunciation dictionary”. The claimed “pronunciation dictionary” is an abstract quantity.

We conclude that the claimed “pronunciation dictionary” of independent claims 1 and 5 are non-statutory subject matter because (1) they do not fall within one of the four statutory categories of subject matter under 35 U.S.C. § 101, and (2) they are an abstract idea. The categories of statutory subject matter are “process, machine, manufacture, or composition of matter.” **35 U.S.C. § 101**. A “process” is a series of acts and, since claims 1 and 5 do not recite acts, they are not processes.

The three product classes of machine, manufacture, and composition of matter have traditionally required physical structure or substance. “The term machine includes every mechanical device or combination of mechanical powers and devices to perform some function and produce a certain effect or result.” **Corning v. Burden**, 56 U.S. 252, 267 (1854); **see also Burr v. Duryee**, 68 U.S. (1 Wall.) 531, 570 (1863) (a machine is a concrete thing, consisting of parts or of certain devices and combinations of devices). Modern day machines are electrical circuits and devices, such as computers. A



“manufacture” and a “composition of matter” are defined in **Diamond v. Chakrabarty**, 447 U.S. 303, 308, 206 USPQ 193, 196-97 (1980):

[T]his Court has read the term “manufacture” in accordance with its dictionary definition to mean “the production of articles for use from raw or prepared materials by giving to these materials new forms, qualities, properties, or combinations, whether by hand-labor or by machinery.” **American Fruit Growers, Inc. v. Brogdex Co.**, 283 U.S. 1, 11 (1931). Similarly, “composition of matter” has been construed consistent with common usage to include “all compositions of two or more substances and ... all composite articles, whether they be results of chemical union, or of mechanical mixture, or whether they be gases, fluids, powders or solids.” **Shell Development Co. v. Watson**, 149 F. Supp. 279, 280 (D.C. 1957) (citing 1 A. Deller, Walker on Patents § 14, p. 55 (1st ed. 1937). [Parallel citations omitted.]

A “pronunciation dictionary,” while capable of being physical, has no concrete tangible physical structure, and does not itself perform any useful, concrete and tangible result; thus, a “pronunciation dictionary” does not fit within the definition of a “machine.” A “pronunciation dictionary” is not matter and thus is not a “composition of matter” under the statute.

A “manufacture” is the residual category for products. 1 Chisum, Patents § 1.02[3] (2004) (citing W. Robinson, The Law of Patents for Useful Inventions 270 (1890)). If a signal falls within any category of § 101, it must fall within this category,

and thus we look at the category in more detail. The CCPA held in **In re Hruby**, 373 F.2d 997, 153 USPQ 61 (CCPA 1967) that there was no distinction between the meaning of “manufacture” in § 101 and “article of manufacture” in § 171 for designs. The issue in **Hruby** was whether that portion of a water fountain which is composed entirely of water in motion was an article of manufacture. The CCPA relied on the analysis of the term manufacture in **Riter-Conley Mfg. Co. v. Aiken**, 203 F. 699 (3d Cir.), **cert. denied**, 229 U.S. 617 (1913), a case involving a utility patent. The CCPA stated in **Hruby**:

The gist of it is, as one can determine from dictionaries, that a manufacture is anything made “by the hands of man” from raw materials, whether literally by hand or by machinery or by art.

373 F.2d at 1000, 153 USPQ at 65. The CCPA held that the fountain was made of the only substance fountains can be made of--water--and determined that designs for water fountains were statutory. Articles of manufacture in designs manifestly require physical matter to provide substance for embodiment of the design. Thus, since “article of manufacture” under § 171 has the same meaning as “manufacture” under § 101, it is inevitable that a manufacture under § 101 requires physical matter.

Some further indirect evidence that Congress intended to limit patentable subject matter to physical things and steps is found in 35 U.S.C. § 112, sixth paragraph, which states that an element in a claim for a combination may be expressed as a “means or step” for performing a function and will be construed to cover the corresponding

“structure, material, or acts described in the specification and equivalents thereof.”

“Structure” and “material” indicate tangible things made of matter, not energy.

Since the claimed “pronunciation dictionary” is not “made” from physical substance, we conclude that it is also not a “manufacture.” In summary, we hold that the “pronunciation dictionary” of claims 1-8 is non-statutory subject matter because it does not fall within any category of § 101. In addition, one of the judicially recognized exceptions is an “abstract idea.” **Diamond v. Diehr**, 450 U.S. 175, 185, 209 USPQ 1, 7 (1981). Signals can be physical quantities or abstract quantities. **See In re Walter**, 618 F.2d 758, 770, 205 USPQ 397, 409 (CCPA 1980) (“The ‘signals’ processed by the inventions of claims 10-12 may represent either physical quantities or abstract quantities; the claims do not require one or the other”). The claimed “pronunciation dictionary” has no physical attributes and is thus considered an “abstract idea.” No practical application is recited for the “pronunciation dictionary” because the “pronunciation dictionary” is not applied to subject matter that falls within § 101.

Following the holding in **In re Lowry**, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994), wherein claims to a data structure stored in memory were held to be statutory subject matter because of the statutory nature of the memory, no memory or other physical structure is claimed here and our decision is not controlled by **Lowry**.

Appeal No. 2005-2200  
Application No. 09/590, 613

This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 CFR § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 CFR § 41.50 (b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner . . . .
- (2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record . . . .

### **CONCLUSION**


To summarize, the decision of the examiner to reject claims 1-13 under 35 U.S.C. § 103 is affirmed and we enter NEW GROUNDS of REJECTION under 35 U.S.C. § 101 and 112, second paragraph under 37 CFR 41.50(b).

Appeal No. 2005-2200  
Application No. 09/590, 613

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

**AFFIRMED - 37 CFR § 41.50(b)**

  
ERROL A. KRASS  
Administrative Patent Judge

  
JOSEPH L. DIXON  
Administrative Patent Judge

  
LANCE LEONARD BARRY  
Administrative Patent Judge

BOARD OF PATENT  
APPEALS  
AND  
INTERFERENCES

JD/rwk

Appeal No. 2005-2200  
Application No. 09/590, 613

TEXAS INSTRUMENTS INCORPORATED  
P O BOX 655474, M/S 3999  
DALLAS, TX 75265